

In the Claims:

1 1. (currently amended) A bellows-type pipe junction for
2 joining a first pipe end of a first pipe with a second pipe
3 end of a second pipe having a spacing distance between the
4 first pipe end and the second pipe end, said pipe junction
5 comprising:

6 a first sleeve section configured and dimensioned to
7 be fitted onto the first pipe end;

8 a second sleeve section configured and dimensioned to
9 be fitted onto the second pipe end;

10 a flexible offset section located and extending
11 between said first and second sleeve sections, having a
12 first end adjacent to said first sleeve section and a
13 second end adjacent to said second sleeve section;

14 a first flexible joint connecting said first end of
15 said offset section with said first sleeve section; and

16 a second flexible joint connecting said second end of
17 said offset section with said second sleeve section.
18 section;

19 and further including at least one feature selected
20 from the group consisting of:

21 a first feature wherein said first flexible joint
22 comprises three coaxial portions that have different
23 diameters and overlap each other and are successively
24 joined to one another to form a Z- or S-shaped
25 cross-sectional configuration, having an externally open
26 gap between an innermost one and a middle one of said

27 coaxial portions, and having a gap adapted to receive a
28 pipe wall of the first pipe end between an outermost one
29 and said middle one of said coaxial portions,

30 a second feature wherein said first end of said offset
31 section includes a transition portion that has a conically
32 tapering inner diameter and that is configured to be
33 plugged into the first pipe end,

34 a third feature wherein said second end of said offset
35 section includes an annular lip seal configured and
36 dimensioned to extend into the second pipe end, and

37 a fourth feature wherein said second flexible joint
38 comprises a conically flared portion extending and
39 conically outwardly flaring from said second sleeve
40 section, and an undulating bellows portion transitioning
41 from a smaller diameter of said second end of said offset
42 section to a larger diameter of said flared portion.

1 2. (original) The bellows-type pipe junction according to
2 claim 1, wherein said first and second flexible joints are
3 respective first and second folded bellows joints.

1 3. (original) The bellows-type pipe junction according to
2 claim 1, wherein said first and second sleeve sections,
3 said offset section, and said first and second flexible
4 joints are all integral and continuous with one another and
5 form a single monolithic component consisting of a single
6 continuous material.

1 4. (original) The bellows-type pipe junction according to
2 claim 1, wherein said first flexible joint at said first
3 end of said offset section is arranged and configured to be
4 located in or extend into the first pipe end.

1 5. (currently amended) The bellows-type pipe junction
2 according to claim 1, including said first feature, wherein
3 said first flexible joint comprises three coaxial portions
4 that have different diameters and overlap each other and
5 are successively joined to one another to form a Z or
6 S-shaped cross sectional configuration, having an
7 externally open gap between an innermost one and a middle
8 one of said coaxial portions, and having a gap adapted to
9 receive a pipe wall of the first pipe end between an
10 outermost one and said middle one of said coaxial portions.

1 6. (currently amended) The bellows-type pipe junction
2 according to claim 1, including said second feature,
3 wherein said first end of said offset section includes a
4 transition portion that has a conically tapering inner
5 diameter and that is configured to be plugged into the
6 first pipe end.

1 7. (currently amended) The bellows-type pipe junction
2 according to claim 1, including said third feature, wherein
3 said second end of said offset section includes an annular
4 tip seal configured and dimensioned to extend into the
5 second pipe end.

1 8. (original) The bellows-type pipe junction according to
2 claim 1, wherein said second flexible joint comprises a
3 radially outwardly protruding folded rim arranged between
4 and joining said second end of said offset section and said
5 second sleeve section.

1 9. (currently amended) The bellows-type pipe junction
2 according to claim 1, including said fourth feature.
3 wherein said second flexible joint comprises a conically
4 flared portion extending and conically outwardly flaring
5 from said second sleeve section, and an undulating bellows
6 portion transitioning from a smaller diameter of said
7 second end of said offset section to a larger diameter of
8 said flared portion.

1 10. (original) The bellows-type pipe junction according to
2 claim 1, wherein said second sleeve section includes an
3 axially compressible bellows portion.

1 11. (currently amended) A pipe joint arrangement comprising:
2 a first pipe having a first pipe end;
3 a second pipe having a second pipe end spaced apart
4 from said first pipe end; and
5 a bellows-type pipe junction that joins said first
6 pipe end with said second pipe end;
7 wherein said pipe junction comprises:

8 a first sleeve section fitted onto said first pipe
9 end;

10 a second sleeve section fitted onto said second pipe
11 end;

12 a flexible offset section located and extending
13 between said first and second sleeve sections, having a
14 first end adjacent to said first sleeve section and a
15 second end adjacent to said second sleeve section;

16 a first flexible joint connecting said first end of
17 said offset section with said first sleeve section; and

18 a second flexible joint connecting said second end of
19 said offset section with said second sleeve section.
20 section;

21 and said pipe junction further includes at least one
22 feature selected from the group consisting of:

23 a first feature wherein said first flexible joint
24 comprises three coaxial portions that have different
25 diameters and overlap each other and are successively
26 joined to one another to form a Z- or S-shaped
27 cross-sectional configuration, having an externally open
28 gap between an innermost one and a middle one of said
29 coaxial portions, and having a gap receiving a pipe wall of
30 said first pipe end between an outermost one and said
31 middle one of said coaxial portions,

32 a second feature wherein said first end of said offset
33 section includes a transition portion that has a conically
34 tapering inner diameter and that is plugged into said first
35 pipe end,

36 a third feature wherein said second end of said offset
37 section includes an annular lip seal that extends into said
38 second pipe end, and

39 a fourth feature wherein said second flexible joint
40 comprises a conically flared portion extending and
41 conically outwardly flaring from said second sleeve
42 section, and an undulating bellows portion transitioning
43 from a smaller diameter of said second end of said offset
44 section to a larger diameter of said flared portion.

1 12. (original) In an aircraft having an aircraft fuselage, a
2 first pipe having a first pipe end in or extending from
3 said fuselage, a drain mast mounted on said fuselage and
4 including a second pipe having a second pipe end, and a
5 bellows-type pipe junction joining said first pipe end with
6 said second pipe end,

7 an improvement wherein said pipe junction comprises:
8 a first sleeve section fitted onto said first pipe
9 end;

10 a second sleeve section fitted onto said second pipe
11 end;

12 a flexible offset section located and extending
13 between said first and second sleeve sections, having a
14 first end adjacent to said first sleeve section and a
15 second end adjacent to said second sleeve section;

16 a first flexible joint connecting said first end of
17 said offset section with said first sleeve section; and
18 a second flexible joint connecting said second end of
19 said offset section with said second sleeve section.

1 13. (new) The improvement in the aircraft according to claim
2 12, wherein said first flexible joint comprises three
3 coaxial portions that have different diameters and overlap
4 each other and are successively joined to one another to
5 form a Z- or S-shaped cross-sectional configuration, having
6 an externally open gap between an innermost one and a
7 middle one of said coaxial portions, and having a gap
8 receiving a pipe wall of said first pipe end between an
9 outermost one and said middle one of said coaxial portions.

1 14. (new) The improvement in the aircraft according to claim
2 12, wherein said first end of said offset section includes
3 a transition portion that has a conically tapering inner
4 diameter and that is plugged into said first pipe end.

1 15. (new) The improvement in the aircraft according to claim
2 12, wherein said second end of said offset section includes
3 an annular lip seal that extends into said second pipe end.

1 16. (new) The improvement in the aircraft according to claim
2 12, wherein said second flexible joint comprises a
3 conically flared portion extending and conically outwardly
4 flaring from said second sleeve section, and an undulating

5 bellows portion transitioning from a smaller diameter of
6 said second end of said offset section to a larger diameter
7 of said flared portion.

1 17. (new) The pipe joint arrangement according to claim 11,
2 wherein said pipe junction includes said first feature.

1 18. (new) The pipe joint arrangement according to claim 11,
2 wherein said pipe junction includes said second feature.

1 19. (new) The pipe joint arrangement according to claim 11,
2 wherein said pipe junction includes said third feature.

1 20. (new) The pipe joint arrangement according to claim 11,
2 wherein said pipe junction includes said fourth feature.

[RESPONSE CONTINUES ON NEXT PAGE]